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INDIVIDUAL DIFFERENCES
IN THE
TEACHING OF THE PENTATEUCH

Submitted by

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CHAPTER I

JEWISH EDUCATION

Education has been the prime fact in their national and racial existence. The greatest lesson to be drawn from the history of the Jews is that a strict adherence to an educational system based upon a peculiarly high religious and moral idea has preserved the unity of the race in a way that no political system could approximate. The salvation of this people has been due to its education.¹

Thus writes Harrison Wildes regarding Jewish education.

The Jews have been pioneers in the field of education. The precept of the Bible; "and thou shalt teach² them diligently unto thy children..." has been one of those which have been heeded by them under the most trying and difficult conditions over thousands of years.

The two hundred and fifty years of Jewish life in America, from their first arrival in 1654 until 1904, may be considered as only a prelude to the intensely dramatic forty years which have followed. During all this time the Jewish population of America formed such a minor part of the

1. Quoted by Louis Wirth, "Education for Survival: The Jews," The American Journal of Sociology, 48: 686, May, 1943.

2. Deuteronomy VI, 7.

entirety of the Jewish people, and also such a minor portion of the general population, that they were of no great importance in Jewish life in general, nor in American life. They were not capable of adding anything significant to the development of the Jewish people as such. What Jewish education there was consisted either of a copy of the Sunday school of their Christian neighbors, or of an exact reproduction of the East European "cheder."

It was only during the last forty years that American Jewish education proper came into being, after American Jewry had received an infusion of fresh life blood in the form of the large Jewish immigrations from Eastern Europe and the small Jewish community grew larger and more conscious of itself.

What are the aim and purpose of the Jewish religious school in America? What is its function? In essence its purpose and function remain the same that they have always been, in other lands and distant times.

The Jewish religious school seeks to develop the religious consciousness of the child, to provide him with a knowledge of the sources of Judaism and Jewish history, to cultivate in him a sense of loyalty to Israel and the higher aims of human society, and to help him preserve his dignity and self-respect as a Jew in a predominantly non-Jewish world.³

3. Rabbi Benedict Glazer, "The Church and the Child," Child Study, 13: 144, February, 1936.

It [Jewish education] has been concerned with the transmission of knowledges and skills of a sort, it has been designed to nurture a consciousness of a common past and a common destiny...inculcating a sense of loyalty to a historic people with deep roots in the past and of sharing the future of that people despite the seeming discrepancy between the future of the one and the fate of the many.⁴

The American Jewish community has developed three types of schools to help it realize its aims of providing a Jewish education for its youth. These schools differ in the degree in which do their sponsors as regards the intensity of Jewish feeling; but it is a difference only of degree, not of kind. The following information is taken in essence from an article in Religious Education by Israel

⁵

S. Chipkin.

1. The Sunday school, which meets once a week, is attended by approximately 5 per cent of the Jewish children of school age, of which about 70 per cent stay for only four years, the rest continuing to complete the full six year course.

2. The supplementary weekday school, meeting daily after public school hours except on Fridays, and on Sunday mornings. Weekly instruction hours vary from six to ten hours, besides extra-curricular activities, as Sabbath ser-

4. Wirth, op.cit., p. 690.

5. Israel S. Chipkin, "How Effective is Religious Education in Meeting the Present Situation: Within the Jewish Group," Religious Education, 31: 205-12, July, 1936.

vices. Attendance varies from two to six years. Instruction is given mostly in English, but sometimes also in Hebrew or Yiddish.

3. The Jewish all day school, which meets during weekdays from nine in the morning till four or seven in the evening. The day is mostly divided into two parts, for Jewish and secular studies respectively.

In the Sunday school the child is primarily prepared for worship and social and charitable functions of a Jewish nature. Some biblical stories are told and the child is taught some Jewish history. Jewish customs and festivals are explained, ethical precepts are inculcated, and sometimes a little Hebrew is also taught.

The supplementary weekday school introduces the pupils to the synagogue, to Jewish communal and international life. Most of the time is spent in mastering the prayers in Hebrew, learning text of Bible in original, in acquiring the elements of Hebrew as spoken and written language. Jewish customs and ceremonies are practiced, and the pupils participate in some local or Palestinian Jewish activities. In some cases, a little more attention is given to Jewish history and current events, and the emphasis on language or content of the Bible varies considerably. Because of the comparatively short stay of the pupils, they cover little ground in all of these subjects.

There is a variant of this type of school, a product

of the Yiddish speaking labor movement, which emphasizes in its curriculum the study of the Yiddish language and presents Jewish history with a proletarian slant. It teaches social and national customs rather than religious events and experiences, and can hardly be called a religious school.

The whole-day Jewish school attempts to give its pupils a more thorough grounding in the Jewish subjects than is possible in the short periods of the supplementary school, when the pupil has a whole school day behind him. It enables the child to get a more comprehensive picture and experience of Jewish life. There are two types of this school. (1) The orthodox parochial school, where the religious aspects of Jewish education are emphasized. It maintains a separate staff of teachers for the Jewish and general part of the curriculum. Because of the selection of pupils, they are usually of a high intellectual quality, and attain a high academic rating in both departments. (2) The progressive Jewish school, which is much like a modern progressive American private school. There is no division of teaching staff or school day, and the Jewish studies are integrated in the general curriculum. It stresses the social aspects of Jewish education. Both of these types of school are a heavy financial burden on the community that maintains them.

Notwithstanding the diversity of schools, American Jewish education still retains some basic elements common

to all of them. These have been enumerated as follows:

1. The classic continuing Jewish tradition-- literary, institutional, and ethical-- and the heroic element in it.
2. Identification with the Jewish people, knowledge of its past and the desire for its survival.
3. Rebuilding the Jewish community in Palestine, and concern with Jewish life in other lands.
4. Concrete form of personal Jewish living.
5. Responsible membership in the American Jewish community.⁶

What is the philosophy of Jewish education? When we speak of the survival value of Jewish education we mean orthodox Jewish education. It is this traditional education that has proven its value during the thousands of years of national dispersion. It is this education that has given the Jewish people its national character. There is ample justification for applying to its philosophy the phrase "the philosophy of Jewish education."

It is commonplace that the philosophy of education is founded on the philosophy of life. Judaism may be conceived of as a religion which seeks to teach the proper relationship between man and God and man and man.

6. Alexander M. Dushkin, "What is American Jewish Education?", Education, 64: 546, May, 1944.

...The word of God is embodied in the Torah revealed to Moses on Mt. Sinai and transmitted by him to the Israelites. Torah, in the original sense, includes the Pentateuch and its oral interpretations which has been passed on from generation to generation, which later formed the basis for the halachic (legalistic) portion of the Talmud. Without the Torah there can be no Judaism.

.....

Reduced to simplest terms, the philosophy of Jewish education may be said to be built upon the belief in a personal God, a revealed truth, and the teaching of this truth. By exercising his free will toward the fulfillment of the precepts, each individual, no matter of which group, may attain immortality. The will to do presupposes a knowledge of what to do, obtainable only through proper instruction.

Knowledge and action--these are the twin purposes of Jewish education, a system which... 'has outlasted every other system whatsoever [and which is consequently]...the most successful educational experiment ever staged in the history of religion.' (Frederick Elby and Charles F. Arrowood, The History and Philosophy of Education: Ancient and Medieval, New York, Prentice Hall, p. 157)⁷

It is self evident from what has been said that in such an educational program the study of the Bible must take the foremost place.

...The pedagogic value of Bible study from a religious, ethical, social and national point of view is universally recognized. It is through this Book, that our pupils may come into possession of the most significant and the profoundest racial experiences and may acquire the ideas, teachings and values of the past

7. William B. Brickman, "Education for Eternal Existence: The Philosophy of Jewish Education," School and Society, 57: 555, May, 1943.

which have served as incalculable resources of guidance for the evolution and control of current experiences.⁸

The real implications of this Jewish religious education, however, can only be realized by the teaching of the Bible from the original.

The study of the Bible in this form presents some weighty pedagogical problems, both from the aspect of its form and its content. Chomsky⁹ has stated these difficulties and the essence of his enumeration follows:

1. Its language is supremely artistic, its style tersely laconic, compact, and of elliptic artistry; it is rich in symbolic allusions, but scant in descriptive detail.

2. Many Bible stories are questionable in terms of pedagogical value for character training; many contain supernatural elements, and may be recognized by some pupils as unreal; other stories emphasize moral standards not in conformity with our modern standards of ethical codes.

3. The language of the Bible is, as we know, grammatically, idiomatically, and lexically too difficult and requires a more adequate preparation.

8. William Chomsky, "The Problem of Bible Teaching in our Hebrew Curriculum," Jewish Education, 10: 85, 1938.

9. Ibid., pp. 86-7.

In addition to these specific problems of Bible teaching, we have to add the general difficulties of the Hebrew school. Since attendance is purely voluntary, discipline presents more of a problem than in the public school. Secondly, the child comes there after a whole day of public school attendance, with the knowledge that the majority of his fellow-students are free to do as they please. That the Jewish school is as successful as it is may be considered a compliment to the school as well as to the Jewish child and its parent.

It is needless to say that the general problems that trouble educators are also felt by the Hebrew school. Conspicuous among these is the problem of individual differences, which has been weighing heavily on the minds of educators ever since the grade system was introduced. This problem is intensified in the Hebrew school by the fact that children do not start attendance at the same age and consequently the school population is not only more heterogeneous, but homogeneous grouping is also more difficult.

In the following chapter some aspects of the general nature of this problem will be discussed, and although no special reference is made to the Hebrew school, it may be understood that they are equally extant in the Hebrew school. A contribution to the solution of the problem will be presented thereafter.

CHAPTER II

INDIVIDUAL DIFFERENCES

It is an obvious fact that individuals differ from each other in their exterior appearance. It can hardly escape anyone's attention that they also differ in their behaviour in any one given situation or, as the psychologist would say, they react differently to the same stimulus. This difference in reaction may be either necessitated by the individual's physical or neural make-up, or it may be the result of a volitional selection of one out of a number of possible reactions. The latter makes for the element of unpredictability which we encounter in our social relations. If everybody would react to a given situation in the same way we would be able to conduct our social intercourse with scientific exactitude. We would live in an air of the laboratory rather than in that of a gambling-house.

This pattern of reaction behavior, we know, is not a static quality. Underlying the behavior of the individual, it has been found, is a dynamic factor which accounts for the mental evolution of the individual and of man's society as a whole. The process which brings about this change

is known as learning. This is the dynamic factor in the life of the individual as well as in the development of society. We thus may distinguish between two factors which make for variability in the individual, the one static, the other dynamic. Not only do persons differ in their present behavior, but they also differ in their speeds and ways of learning. The one is their actual degree of difference, the other their potential difference.

No actual differences in mental ability are evident in normal newly born babies, although they do differ in physical traits such as appearance, size, weight and height. Their instincts or reflex patterns are similar. They all react in the same way to lack of support, i.e., with symptoms of fear; to inhibition of movement, i.e., with symptoms of rage; and to stimulation of the skin, i.e., with symptoms of love. Their reflexes of self preservation are uniform. Only after they have embarked on their adventure of learning they begin to manifest differences, developed by the factor of potential difference which influences their rate of learning. Tests have been developed by which children of somewhat over two years of age can demonstrate superiority or inferiority of ability.

The dynamic factor underlying all learning cannot be determined directly, but only indirectly through gauging the actual ability of the person at a given moment, and

by taking into consideration his or her age in judging the achievement can we determine the value of this factor. This is known as the intelligence quotient. This I.Q. is of great value and interest to the educator, since it has been found to be closely correlated with school success. It is one of the most important, if not the most important aspect of individual differences as regards capacity to learn and expectancy of success.

Of course the I. Q. is not the only aspect of individual differences between people or students. There are other physiological and environmental factors which influence his learning process. But the I.Q. comes nearest to gauging the specific learning capacity, whatever its physiological processes are.

The existence of these individual differences has been recognized by the earliest thinkers, although the term and its application to educational problems may be of more recent origin. This early recognition, however, was based on mere observation. No attempt had been made to conduct scientifically controlled experiments or a systematic study to find out just how individuals differ and to establish a standard of measurement or criterion of judgment. Also it was believed that people fell into clearly differentiated types. Even when these differences were recognized little was done to take them into account in the building of the educational structure. The attitude of

the educators remained fatalistic all through the ages. In general the factor of individual differences remained a selective one. As a result only a small part of the people received a worthwhile education, the percentage varying from country to country and from era to era. On the other hand this philosophy was not carried consistently to its logical conclusion. Schools were managed with such a harsh regime as if the learning process were governed by mere volition and the pupil had no physiological limitations to his learning capacity. The view that this attitude persisted until quite recently is expressed in the following passage taken from the Thirty-seventh Year Book of the National Society for the Study of Education:

In nineteen hundred it was commonly supposed that any child could learn anything as well as any other child if only he would apply himself with equal industry. Under such a conception of the potentialities of children, failure could only mean lack of effort and industry, both of which were considered to be indicative of lack of moral character. Hence the severity that prevailed in the schools' condemnation of failures and in the punishments and discipline that the school administered.¹

Of course not all educators were as blind as would appear from the foregoing. There were individual educators who were far in advance of their contemporaries. A notable

1. S. A. Courtis, "Contributions of Research to the Individualization of Instruction," Thirty-seventh Yearbook of the National Society for the Study of Education, Part II, p. 203.

example we have in figure of Juan Luis Vives (1492-1540) who, in the words of W. Kane was "one of the most outstanding educators in the history of Christian education and regarded by many authors who have studied his works as the real founder of educational psychology."²

His reminder to the teachers in a certain school "every two or three months to deliberate and judge, with paternal affection and grave discretion; concerning the needs of the pupils, and appoint each boy to that work for which he seems most fitted,"³ evinces a quite modern grasp of the educational problems implied in the recognition of individual differences. But an understanding of the problem as the one just cited was the exception rather than the rule. It was restricted to a few outstanding personalities in the field of education or outside of it, while the rank and file of teachers and even administrative officers, who frequently did not even possess any professional training, were either ignorant of the problem and its implications or too apathetic to take any steps toward its solution.

Colonial America took over the European system of education together with its philosophy and its shortcomings. As long as instruction in the lower levels was by

2. Thomas F. Jordan and John A. Kehoe, "Individual Differences as Viewed by Modern Schools of Psychology," The Catholic Educational Review, 38: 203, April, 1940.

3. Ibid., p. 203.

the individual method, the factor of individual differences did not attract much attention. In a study undertaken⁴ by Lawson in which he examined thoroughly all of the officially published reports of one large city covering a period of seventy-five years, and scanned such hundred annual reports of principals, supervisors, committees and boards of education in nine other large cities covering periods varying from sixty to a hundred years, he found that the problem of individual differences played only a minor role in the eyes of these administrators and official bodies. Prior to the Civil War only about six per cent of the statements dealt with the problem of meeting individual needs. But during the twenty-five years prior to 1936 the percentage was about thirty-six.

Educators tacitly admitted their inability to cope with the problem of providing for the individual. This is evident from the way the organization of the curriculum was approached. Speaking of elements of the curriculum the Boston school commissioner said: "We should graduate them (the studies) neither to the highest, nor to the lowest order of intellect, but aim to adapt them to the average of⁵ mental ability."

4. D. E. Lawson, "The Growth of Individualization," Journal of Education, 122: 266-8.

5. Ibid., p. 267.

Often educators, apparently, took a rather philosophical view of the shortcomings of their pupils and excused their own pedagogical failures by employing a religious argument. In an earlier report than the one just quoted, the Boston commissioner remarks: "We should recollect that this distribution is made by a higher power than our own, and that it is fruitless to confound the eternal distinctions of God."⁶

In the middle of the nineteenth century, though, the time at which the above mentioned reports were written, this supine attitude was already on the way out. The superintendent of Cincinnati in 1853 desired some differentiation to meet the needs of pupils who planned to leave school early. And the Chicago system in 1869 reported special promotions for superior children, as did the Denver system a few years later.⁷ The main cause for this change in attitude was the introduction of the grade system during this period. The older type of instruction fell into disrepute; but after the first wave of enthusiasm over the advantages of the new method over that of individual instruction had died down,⁸ the new problem of the lockstep began plaguing educators. Those who did not catch the

6. Lawson, op.cit., p. 267..

7. Ibid.

8. Ray B. Dean, "What Has Become of the Individual-Instruction Movement?" School and Society, 58: 166, September, 1943.

spirit of the new era were satisfied to let matters take their course and disclaimed responsibility for the dull pupils' education, as did the superintendent of the Baltimore system in these contemptuous words:

In order not only to perpetuate any existing excellence, but to enlarge its area, two things are necessary. First, to be rid of those who stand at zero, and like leaden weights hang on many who, if detached, might rise....As to the former class, there is no difficulty, for they will either take the hint from their own averages, and bid us good-bye, or they will very quietly, and 'unknown to fame,' pass out at the end of their time....⁹

The more progressive educators did not satisfy themselves with such a negative solution as the one just cited. Various solutions were offered by various educators. Foremost among these was William T. Harris, who as superintendent of schools at St. Louis pointed out the evils of the class method of teaching and of annual mass promotion and urged that promotions be frequent and groupings flexible. Preston W. Search was the first educational leader to advance a practical program of individual instruction within the graded school system. In 1888 he established an individual instruction program in the public schools of Pueblo, Colorado, which marked the beginning of the modern individual-instruction movement.¹⁰

The movement, however, did not get into its real strides until the turn of the century. In 1892 Charles

9. Lawson, op.cit., p. 266.
10. Dean, op.cit., p. 165.

Eliot addressed the National Education Association on "Undesirable and Desirable Uniformity in Schools;" and a decade later E. L. Thorndike and others began to use laboratory techniques in psychological measurements. The Boston report for 1906 shows that one of the chief aims for the first important change in that school system's organization that had been made in many years, was that of providing for individual differences.

In 1912 the Oakland superintendent stated: "A generation ago the subject taught was of more importance than the child." He then contrasted the new and the old, stating that the child, as an individual, had at last reached the final point of educational attention.

In 1916, the Seattle superintendent mentioned the "very noticeable movement toward increased care and provisions for the individual manifested in the country at large."¹¹

As in many another sphere of human inquiry, so in the field of education World War I gave added impetus to the movement with the advent of intelligence testing. Through the use of standardized tests "it was proved, at least to the satisfaction of all except the most sceptical, that the universal law of differences is as applicable to

¹¹ Lawson, op.cit., p. 267.

human beings as it is to the fauna, the flora, the snow-
flakes, and the grains of sand."¹²

Just about this time, during the years 1913-17, Frederick L. Burk, president of the San Francisco Normal School, and the next great leader in the individual instruction movement, led his faculty in devising special techniques for teaching various school subjects individually to pupils in a class group.

Charleton W. Washburne, a member of Burk's faculty, became superintendent of schools at Winnetka, Ill. in 1919. He and his faculty instituted and improved the Burk system of individual instruction.

At about the same time the Winnetka system was developed, another plan of individual instruction, developed by Helen Parkhurst and called the Dalton laboratory plan, spread rapidly to many school systems. Like the Winnetka system, this plan received widespread publicity.

The Dalton and Winnetka plans were outstanding in the 1920's, but they were not alone in the field of individual instruction. Such plans as the McDade, the Batavia, the Detroit, and a score of others were evidence of the widespread interest in ways and means of giving individual
13
instruction to pupils in class groups.

12. C. Currian Smith, "The Implications of Individual Differences," Bulletin of Department of Secondary School Principals, Vol. 23, Feb., 1939, pp. 9-17.

13. Dean, op.cit., p. 165.

It must not be inferred from this that all of these plans radically differ from each other; on the contrary, ¹⁴ Billet has only found three distinctly original and exclusive plans, the rest being characterized more or less by an adaptation of the unit assignment. In addition to the Dalton plan, the Vinnetka system, and those plans characterized by the individual unit assignment, the Morrison plan is recognized as a distinctive contribution to the provisions for individual differences. This latter is based on certain practices advocated by Professor Morrison for dealing with individual differences, taken from a comprehensive volume dealing with teaching problems in the secondary school.

This movement toward individual instruction seems to have reached its peak in the latter 1920's. During the 1930's it declined rapidly. This was due partly to the fact that too high hopes had sometimes been entertained concerning the individual instruction plans which were expected to serve as panacea for all ills of the school; to the inefficient handling of the program by teachers not properly conversant with the procedures which the plan required, and which call for a high degree of professional skill; and finally to the rise of the activity movement whose

14. Roy O. Billett, "Provisions for Individual Differences Marking, and Promotion," Bulletin, No. 17, Monograph No. 13, United States Bureau of Education.

philosophy is diametrically opposed to that of the individual instruction plans inasfar as it frowns on any formal organization of subject matter.¹⁵ Mr. Washburne, the foremost advocate of individual instruction at the present time, expresses his wondering at the apparent lack of interest in and the scarcity of materials for the individualization of instruction as late as in 1940, in the following words:

Why...after all these years, has not school practice changed more decisively, why are there merely vague gestures toward adaptation to individual differences and makeshift plans in instruction of the schools of teaching? Why is there not a nation-wide, a world-wide concentrated effort to organize schools so that children learn what they are ready to learn?¹⁶

Mr. Washburne goes on to decry the conservative attitude of educators and parents alike, in which he sees the main obstacle in the path of efficient individualized instruction.

Certainly the need for individualization of instruction in our high schools has grown tremendously in the last two decades, during which the number of pupils has multiplied manifold. As one teacher puts it, "our modern democratic schools are composed of countless varieties of personalities, differing in intelligence, age, health,

15. Dean, op.cit., p. 166.

16. Carleton W. Washburne, "A Living Philosophy of Education," p. 252, cited by Dean, op.cit., p. 165.

physical characteristics, temperament, tastes and interests, sex, economic status, nationality of the father, ability in certain school subjects, and cultural and educational traditions."¹⁷

As the needs have grown, so too has our knowledge and ability of coping with them. At present our knowledge of individual differences is not restricted to that complex of mental functions known as intelligence. It is not so generalized and vague as to measure only in terms of this undifferentiated mass of mental ability, but we have a much more specific knowledge of its various components, be they wholly independent of each other or tied together by a common factor.

...Tests of intelligence have been followed by tests of special aptitudes (e.g., mechanical musical, scientific), of school achievement (e.g. reading, arithmetic, history), of personality (e.g. extroversion-introversion, neurotic tendencies, moral judgment), of attitudes and opinions (chiefly vocational).

.....

...Thus, the systematic study of individual differences has shown that, contrary to popular misconception, people do not fall into distinct types as far as psychological and physical traits are concerned.¹⁸

17. Bernice V. Wall, "Methods in Junior High School to Reach Varying Types of Pupils," Secondary Education, 7: 123, September, 1938.

18. Frank S. Freeman, "The Challenge of the Individual Child," The National Elementary Principal, 19th Year-book, pp. 235-7.

"The educational implications of this distribution of human abilities, though readily discerned, are very significant. First, since the general population is not divisible into two or three ready-made classes in any psychological traits that have been investigated, there are no fixed categories which the school can employ for the purpose of differentiated instruction."¹⁹

In this connection Thorndike wrote in 1911:

It is not possible with ordinary facilities thus to give each individual in each trait the best possible treatment, but knowledge of the amount and distribution of variations will prevent certain blunders. For example, a division into three groups is usually very much preferable to a division into two groups, but the gain by adding a fourth is far less.²⁰

"Second, the range of abilities is such as to make imperative differentiated educational procedures, whether by means of acceleration or enrichment, or both; whether by homogeneous classes or by groupings and individualized instruction within a single more or less heterogeneous class."²¹

Besides the aforementioned physical, mental and neural differences, it has lately been emphasized that individuals differ also in the approach to a given task, i.e. in their work habits. Of how great an influence on the

19. Freeman, op.cit., pp. 237-8.

20. Edward L. Thorndike, Individuality, p. 19.

21. Freeman, op.cit., p. 238.

achievement this approach may be was amply demonstrated in the industrial field when Gilbreth reduced the motions in bricklaying from sixteen to four. Naturally this improve-²²ment in work method increased production considerably.

Under work method is to be understood "any variation in set, attitude, approach, trick of the trade, adjustment mechanism, etc., in other words, qualitative variations in ways²³ of reacting to a situation."

These considerations have a great significance in the evaluation of individual differences. Any physiological limitations which we may discover in the individual may be valid only for a given work method. By varying the method he may be able to overcome his handicap. It gives us additional reason for investigating individual differences with a view towards finding out his particular work method, and try to cure his weaknesses by eliminating wrong²⁴ methods and substituting better ones instead.

Provisions for individual differences may take various forms. They may be in the nature of adjustments of educational philosophy, as aims to be attained. They may be of a scientific nature, as regards goals, materials and methods used. Again they may be administrative and touch

22. Robert H. Seashore, "Work Methods: The Often Neglected Factor Underlying Individual Differences," The Psychological Review, 46: 124, March, 1939.

23. Loc. cit.

24. Ibid., p. 139.

the organization and operation of the school. Finally they may take a supervisory form and apply to curricular and instructional material or touch relations of the pupils among themselves or those between teacher and pupils.²⁵

The development of specific aptitudes has been partly met by the selective features of the modern curriculum. But its full implications have only been realized by the special schools.

Gross handicaps, whether physical or mental, have been met by special classes.

The less obvious and tangible differentiations, though, must be met either by homogeneous grouping or by flexibility of the curriculum itself and its adaptation to these individual differences.

Under this heading fall the varying ability of pupils to concentrate and stay with a job, and their ability to generalize. This means that the bright may be taught in broad units but the dull must stick to rather narrow segments of subject matter. It is doubtful that the unit method will work with dull pupils unless these assignments are so differentiated that the slow learner can deal with rather small minimum learning tasks, clearly outlined. The bright pupil requires clear directions, but once he has them he can

25. S. A. Courtis, "Contributions of Research to the Individualization of Instruction," 37th Yearbook, The National Society for Study of Education, Part II, p. 201.

proceed with much greater independence. The dull pupil
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requires a more concrete goal. When providing for homogeneous grouping it is the task of the teacher to provide a differentiated program which takes into consideration these differences in fixing goals and teaching procedure. Homogeneous grouping in itself does not guarantee maximum efficiency of the learning process.

In considering the problem which these differences create one is led to inquire what influence practice has on differentiation of a group of learners who start out with a certain amount of initial difference, and how further education in general will influence it. In other words, do pupils become more or less different as they assimilate the material through practice, and do differences become more pronounced as they climb the educational ladder?

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Experiments conducted by Garret suggest that differences do not get more pronounced after a certain period of practice, although this has not been definitely established for all kinds of learning. As regards the second half of the question, an answer cannot be given with such

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26. George E. Hill, "The Psychological Basis for Methods in Teaching Pupils of Different Ability Levels," The Social Studies, 29: 253, October, 1938.
27. Henry E. Garret, "Variability in Learning Under Massed and Spaced Practice," The Journal of Experimental Psychology, 26: 566, June, 1940.

certainty. Professor Sandiford writes:

...When we turn to a similar problem, namely, the effect of age on variability, the results are unequivocal. Age increases variability. This means that babies are more alike than public school pupils, public school pupils than high school pupils, and high school pupils than adults. B. A.'s are more alike than M. A.'s or Ph.D.'s....²⁸

Fei Tsoa, however, has conducted experiments which, according to his claim showed the contrary to be true. The educational implications recognized by him as a result of this fact follow:

Since both variability in a mental or scholastic function and the relationship between any two mental or scholastic functions were constant from grade to grade, we should emphasize individual differences of school children as early as possible. Individual differences in learning capacity and achievement in a subject are revealed at the early age levels or in the lower grades. Therefore, the fixed curriculum, based upon the prowess of an average child should be adjusted by a skillful teacher to meet the situation of individual differences in the lower grades.²⁹

It would seem, however, that Tsoa's experimental results do not really contradict the first quoted, widely held view. His experiment, conducted on the same group of pupils as they advanced in their knowledge, proves constancy of variation merely of one and the same group of in-

28. Quoted by Fei Tsoa, The Journal of Experimental Education, 12: 187, March, 1944.

29. Ibid., p. 197.

dividuals as they develop. But it is still possible that the variance among people in the higher brackets of the I. Q. rating is greater than in that of the lower; and that variability increases with the increase of intelligence, as the quote of Professor Sandiford maintains.

That the differences of the superior group itself, however, although initially more pronounced, do not increase with training so rapidly as those of the average group, has been shown, again only by a small-scale and rather narrowly staked experiment, by D. G. Ryans.³⁰

Experiments conducted by Garret³¹ have shown that in learning easier tasks massed practice gives better results than spaced practice, while in learning harder tasks the opposite is true. This fact has some bearing on the problem of individual differences, as what for one is an easy task may be a difficult one for the other with lesser ability.

To obtain an answer to the question of how these individual differences come about or develop, Jordan and

30. D. G. Ryans, "An Observation of the Changes in Variability of High, Medium, and Low 'Intelligence' Groups, Measured at the Beginning and at the End of 'Digit-Symbol' Substitution," The Pedagogical Seminary and Journal of Genetic Psychology, 54: 470, June, 1939.

31. Garret, op.cit., p. 566.

32

Kehoe have reviewed the various schools of psychology with a view of ascertaining their attitude toward the problem of individual differences. They have found them differing considerably as to their interest in the problem and as to the respective role they assign to heredity and environment in causing these variations. The essence of their findings, arranged numerically according to seven schools of psychology, follow below.

1. Structuralism, concerned with structure of the individual in general, does not concern itself with individual differences. This school is led by Wundt.

2. Functionalism, only in a minor sense a school of psychology, propounded by Dewey and Angell, views mental processes as means by which the organism adapts itself to its environment, so as to satisfy its biological needs. It is teleological in its philosophy. It follows that individual differences are caused by the environment.

3. Behaviorism, expounded by Watson, holds that the individual reacts to his environment in a strictly mechanistic fashion; the mechanism of action being the conditioned reflexes. At birth that of the infant consists merely of reflexes with three emotional responses--fear, rage, and

32. Thomas F. Jordan and John A. Kehoe, "Individual Differences as Viewed by Modern Schools of Psychology," The Catholic Educational Review, 38: 201-15, April, 1940.

love. The individual's personality, the behaviorist would have us believe, is merely the sum total of his conditioned responses, and it is nothing but the result of the conditioning of the fundamental reflexes and the three basic emotions. It is an environmental psychology as regards the individual.

4. In the Gestalt psychology individuals do not differ because of different elements in the bundle of their reflexes, but because of different configurational responses. For the bundle they would substitute the Gestalt or configuration, which is an integral whole. Individual differences are attributed by them to the species of the organism to its level of growth and development, and these differences are largely obtained by social and racial conditions. In this school both environment and heredity are of importance.

5. The psychoanalytic school of Freud maintains that individuals differ because of different complexes, different phobias, and different fixations of the libido, or sex instinct. This school also stresses both heredity and environment. Together with the following two schools, it stresses the aspect of the individual's emotional reactions.

6. Alfred Adler's individual psychology regards all men as being equal in potentiality, in ability, and in talent. Variations are due to the different environments. It attaches great importance to the "will to power."

7. The purposive or hormic school of psychology, led by William MacDougall, maintains that all humans are endowed with many instincts in different degrees.

CHAPTER III

INDIVIDUAL DIFFERENCES IN THE STUDY OF THE BIBLE

The Jews of antiquity have not been oblivious of the fact that individuals differ, and have applied this knowledge in the field of education. Even in the admonition of the Proverbs¹ "Train up a child according to his way," Rabbi Elihu of Wilna² sees a warning to the educator not to apply the same inflexible educational method to varying types of child personalities. Each child has his own specific nature which determines the method to be used for his education.

The individuality of personality is recognized by the Talmud in the saying: "Just as people differ in their physiognomy, so they differ in their intellect."³ The Rabbis also recognized the limitations of some students in their saying: "A pupil who does not show any progress after five years of study will not succeed henceforth."⁴ Yet within that period no efforts must be spared in the teach-

1. Proverbs XXII, 6.

2. Commentary on loc. cit.

3. Talmud Bably, Berakot 58a.

4. Ibid., Hullin, 24a.

ing of the individual, as is amply demonstrated by the following story:⁵ A certain pupil of Rabbi Preida did not grasp his lesson with less than four hundred repetitions. Once, when the student anticipated the departure of his teacher the emotional strain prevented him from concentrating, and consequently even the usual number of repetitions were of no avail. The Rabbi, upon listening to the reason of his failure, meekly sat down to repeat the arduous procedure.

A high sense of responsibility is expected of the teacher. A careless teacher is made to bear the taunt of "those who do God's work deceitfully."⁶

The movement for individualization in the public schools during the post war period has its parallel movement in the Hebrew school. Jacob S. Golub, formerly Director of the Bureau of Jewish Education of Cincinnati points out;

Our continued experiments in individualizing Hebrew study constantly brings home to us the wide range of ability among children. The best pupils work six, eight, ten times as fast as the average slow student. The results of the history classroom corroborate the findings. The ablest pupil may have read between two and three hundred pages on a topic and have done all the extra projects suggested during the time that the slow pupil required to read the minimum fifty pages.

.....

5. Ibid. 'Eruvin 54b.

6. Ibid., Baba Batra 21b.

More important even than differences in ability are the differences in willingness to study. Thus if the study admits of organized homework, the child doing the homework regularly is actually given twice or more times the number of hours otherwise possible in the school session alone. The importance of such a plan in the Sunday school is obvious. The work must be organized that the willing pupil will be able to progress without being retarded by the one who does no home work.

Our method must provide for individual differences, qualitatively in the range of difficulty, as well as quantitatively in amount, making home work possible.⁷

With a view towards finding a solution he experimented with an adaptation of the Morrison laboratory plan with its five-step method in the teaching of Jewish history, organized under large units. Examples of units relating to the period up to and including the first temple are topics such as "Our Nomadic Ancestors," "How Israel Lived in Canaan," etc. In the second Temple period some units are "How the State was Re-established," "Why We Celebrate Chanukah," "How we Gave Religion to the World."

In an evaluation of the results the author states that the method may be too thorough for some teachers and not thorough enough for others. He also expresses the opinion that the project method may be used by exceptionally well-trained teachers.

7. Jacob S. Golub, "Some Experiments in the Jewish Sunday Schools of Chicago," Jewish Education, I: 41-2, 1929.

8. Ibid., p. 43.

In a later review of two years with this method he lists the shortcomings generally complained of: The teacher has to spend too much time in administrative work as handing out of papers, etc.; little ground is covered since each topic requires many sessions; too little room is left for teacher initiative; a topic is too long drawn out to hold the child's interest; but the severest criticism applies to the point where the plan claims to be strongest: The plan which envisages three stages, namely envisaging the problem, collecting of data, and generalizing and organizing and applying the data collected, seems to fall down at both ends.

As a remedy the author suggests revision of the size of the unit, and the employment of visual aids, such as posters, maps, etc., to be displayed prominently in the class room for creating a more life-like atmosphere. What weaknesses cannot be eliminated by these provisions will disappear as the teacher gets more experience with the method.⁹

Discussing a similar plan, published by the Union of American Hebrew Congregations, Mordecai S. Soloff remarks:

9. Dr. Jacob S. Golub, "Individuality and the System," Jewish Education, I: 165-72, 1929.

...The supervised study method takes the child as its center and attempts to fashion and mold the work around him. His interests, abilities, and schedules are the guides for determining the contents of the lesson and its procedure. When properly used, the supervised study method does not decrease the work of the teacher but it does provide her with help and guidance. It does not make the subject of Jewish history an interesting game for the pupil, but it does feed him with solid yet digestible, and at times quite palatable fare. It should be possible to win the children's interest, provide them with opportunities to exercise the capacities through which they learn most readily, and then to select, assimilate and retain over an extended period of time the basic facts of Jewish history, develop desirable Jewish habits and attitudes and habits of thought and action.¹⁰

11

E. A. Nudelman discusses the goal method in the teaching of Hebrew, which he had first used in Chicago over a period of three years. One of the advantages cited by him is that of its provisions for individual differences. He cites the case of a group of six or seven boys who, after a period of one year of individual work, gained two years in advancement.

The above are examples of the work which has been done in the Hebrew school to individualize instruction. None of these were directly connected with the study of the Bible.

10. Mordecai S. Soloff, "Problems in Supervised Study," Jewish Education, 10: 102, 1938.

11. E. A. Nudelman, "Three Years of Individual Instruction in the Teaching of Hebrew," Jewish Education, 1: 154-64, 1929.

The trend in Bible study has been towards abridgments. Orthodox educators, however, are opposed to this practice, as the child does not get the proper impression of the Book's unimpeachability, which they consider of paramount importance.

It appeared to the writer that provisions for individual differences should be made on the following bases: The goal in Bible teaching is some degree of efficiency in intelligent reading of the original. The most important element in such a program is the vocabulary. Individual differences will manifest themselves in the form of a greater recognition-vocabulary on part of the brighter pupils. How can we teach the bright and the dull together without doing injustice to at least one of the parties? In many schools homogeneous grouping is impracticable. It is therefore proposed that we do not attempt to teach the weaker pupils more than a minimum vocabulary, comprising those words of highest frequency in the text. This recommends itself from the aspect of the learning process as well as from the aspect of utility. The pupil will learn the most frequent words better because he meets them oftener in the text, and he will need them more urgently in his further reading and study. The brighter pupils should be made to acquire a larger vocabulary.

We can let the slower pupils use a text where the infrequent words are translated for them in footnotes, while

the brighter ones should do without these aids. In these footnotes the difficult constructions may be rendered in an easier form.

An alternative would be to give the slower pupils intensive practice in words which occur too infrequently for their learning them. These practices would take the form of drill practice sentences, and tests.

A prerequisite to such a program is a word count to determine their respective frequencies. A vocabulary count was therefore made of the text of the first seventeen chapters of Genesis, which is frequently the text for the first year of Bible study. Only basic frequencies were counted, i.e., all forms coming under one root heading in the New
¹²Concordance were lumped together. The frequency of the word, in any of its forms, is given for each of these seventeen chapters, and also the number of times it occurs in the rest of the Book of Genesis are given in a separate column. This last column was added since it was thought to be of value in preparing for the second year, when this portion is frequently studied. The words are arranged in alphabetical order and not in order of their occurrence, to enable the teacher to find the frequency of any given word at a glance. By following any given column one may find which

12. Schevil, Book of Words: The New Concordance, 755 pp. (Hebrew).

basic words appear in that chapter, and how frequently.

The tables are designed to aid the teacher in preparing individual lessons or to serve as a basis for a text book. They form Part II of this paper.

A very few words, as pronouns, prepositions, and conjunctions, which are not included in the New Concordance because of their great frequency in the same form, were omitted in this study.

The list includes four hundred and twelve basic words. A count has been made of the number of basic words in the whole of the Old Testament, as classified in the New Concordance. The number has been found to be 2,529. Thus the first seventeen chapters of Genesis include 16.29 per cent of the basic words of the Old Testament. This is a substantial percentage and would indicate that the mastery of this text may provide a good basis for the further study of the Old Testament.

To determine the percentage of new basic words in the text under study, a count was made of the running words of the above mentioned seventeen chapters under intensive study. The sum total was found to be 5,488. This gives a percentage of 7.51 of new words. A detailed Table of the number of running words in each of the seventeen chapters follows the word list.

SUMMARY

The last 25 years have seen the development of an extensive Jewish educational system in America. Among the problems facing the Jewish educator, that of individual differences takes a notable place. In meeting this problem the general considerations of the problem are applicable.

As a special aid in meeting the problem in the Bible study from the original, special care should be taken to insure economy of time and effort. This must take into account word frequencies, with graded goals in mastery for the various ability levels. To this end a frequency list included in this paper should be of considerable help.

PART II

AN INTENSIVE WORD STUDY OF THE
BOOK OF GENESIS

18	50	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	פרק
187		2		1			1	3	1	5					2		1		אב
12								1									1		אבן
																	1		אד
15			1				1	1		7	4	5	11	4	8	11	21	3	אדם
17						4	1			2					1				אחל
1				1				2								3		7	אור
		1								3					1			1	אורח
176			1		5	2	3		2	3					8				אח
29								6	1		3					1	3	2	אחד
13		1																	אחזה
64		7		3	1	1		9	2	6	2		1	9	1				אחר
4			1							1						1			אי
																1			איבה
4				1															איל
				1	1														אים
34								1							1			1	אין
68			1	1		3		2	1	2		2	1		2	2	2	2	איש
58					2					2			3			17	5	2	אכל
3					1	1													אלה
23																1		1	אם
												1	5						אשה
10				1															אמן
503		7	9	11	4	2	6	1	1	7	2	1	3	1	10	15	3	11	אמר
1			1																אנה
123		4	3		2	3	12	4			2	6	2		5	13	4		אניש

[illegible]

[illegible]

18-50	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	פרק
33	7	1	4		3	1			1	1	1			1	2		10	זרע
				1										1				חבר
															1			חגר
2							1											חרל
3										6	2							חדש
				1														חוט
										1								חול
9			1						1			1						חונץ
			1															חזה
13					1									1				הטא
28		1					2		7	4	4	2	1		8	6	8	חי
18	1						14		1		1	2	16			12		חיה
		1																חיק
1														1				חלב
6					1		1	1	1	1		1		1				חלל
4				3														חלק
1															1	1		חמר
1										1								חמם
1		1										2						חמם
				1			2											חמר
1						1												חמר
16				1		1	3		2	1	2	1	10				1	חמש
18												1						חנן
1										2								חסר

[illegible]



[illegible]

[illegible]

18-50	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	פרק
13						1												נמח
1									1							1		נמח
6				4						1				1				נמח
7					2	2	1											נמח
				1														נמח
37				1														נמח
																1		נמח
7	2		2	1								1		2		1		נמח
									1									נמח
26	1			1		2			7							2	4	נמח
											3	1	1				1	נמח
														2				נמח
47	1				3						1			2				נמח
															1			נמח
			1															נמח
											1					1		נמח
122	6	2	4	2	2	1			4					1	3		2	נמח
6																2		סוב
2											1					1		סגר
9										1								סור
										1								סכר
4		1	2															ספר
													1					ספר
1														1				סחר

פרק	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18-50
עבר		2	1	2					4			1		2	2			111
עבר			1					1				2						11
עבר								1				1		1	1			29
עגב				1											1			
עגל															1			
עדן		3	2	1														2
עוד				1			1	6	3								1	31
עוה				1											1			2
ערר															1			
עשב	4	1	1						1									
עסה	7	4	5	1	2	7	4	2	2	2	3	1	1	1		1		114
עסן															1			
עסר														1				1
עסר					3	1	2	4		2				4		1	2	36
עה			1	1				1			1							44
עתק												1						1
עוף	7	2				2	5	3	2									2
עור			1															
עז														1				10
עזב		1																10
עזר		2																1
עיס															1			
עין			3			1							2					59
עין							1	1						1		2		8
עיר										1	3			1				41

פרק	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18-50
עלה		1				1	1	1					1	4			1	62
עלם			1					1										
עלט															1			
עולם			1			2			2				1				4	3
עמם										1				1			1	30
עמק														5				1
ענה											1							25
ענה															1	3		5
ענן						5												
עפר			1									2						1
עץ	4	5	11			1												9
עצב			4		1	1												2
עצם		2					1										2	4
עצר															1			1
עקב			1															6
עקר										1								2
ערב	6							1										6
עורב								1										
ערה						3												3
ערד														1				1
ערל																	6	1
ערם			1															
ערם		1	3															
פה								1										17

פרק	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18-50
פלג									1									
פלט														1				1
פנה	4	1	1	4		5	6			2	4		2			1	4	101
פעם		1																10
פץ										1								1
פצה				1														
פצע				1														
פקח			1															1
פרא																1		
פרד		1							2				3					1
פרה	6		3	1				1	2							2		9
פחה									1									
פחה				1	1	1	1	1										15
צאן			2										1	1				59
צבא	1																	3
צד						1												
צדק						1	1							1				12
צהר						1												2
צוד										2								13
צוח		1	2			1	3					1						20
צחק																	1	10
צעק				1														5
צפון														1				1
צפר							1								1			3

18-50	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	פרק
				1														צורר
38			1															קבר
7					2	2	1	1						1	1	2		קדם
																1		קדש
1																	1	קוה
18		1												2	3			קול
82	3				4	1			3		2	1		1			1	קום
															1			קוץ
19									1								1	קטן
										1								קיץ
2		2				1				3								קלל
33	4			2	3									2				קנה
											1							קנן
5										1								קצה
1		1								1		1		1				קצץ
2										1								קצר
84	3	4			1	2	1						3	5	2	3	5	קרא
6						1												קרב
16			1	1														קרה
										1								קרר
5									3									קשת
115	1	6			3	7	1		4	3	1	3			1	2	7	ראה
27					1		1	1		2					1	1	1	ראש

פרק	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18-50
רוב						2	1						1			1		16
רבה	3		2				2	1	3						1	2	2	12
רבע	1	2			1		5	1			4			2	2			15
רגל								1										19
רדה	2																	
רדס		1													1			
רדף														2				3
רוב								1					1					5
רוח			1			2	2	1										5
רוס							1							1				4
רוע											2					1		5
רחב						1							1					3
רחף	1																	
ריה								2										4
ריק														1				4
רהש											2		1	5	1			7
רמש	7					2	5	4	2									
רעב												2						25
רעה						1							4					18
רעע		2	2			2		1					1					38
רפא														1	1			
רק							1							1				7
רקע	9																	
שאר														1			1	4

[illegible]

18-50	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	פרק
3	1	1		1									8					שמנה
52	1	2		1			1							1	3			שמע
17	2													1	1	1		שמר
4			2															שמש
52	1			1				1	2	1	4	2	3	2	1	2	2	שניים
57	6	3	1	3		2	26		3	1	3	1	47				1	שנה
														2				שנה
3							6											שפח
21		6				1												שפח
13		1		1		1	2	3		1								שפח
2						1			2									שפך
29					1											2		שקה
				1														שרך
1							2											שרף
									2	1	1						3	שרץ
23						1												שרר
7		1								1	2		6				1	ששה
21									1									שהה
															1			תאן
									2	9	7	7						הבה
																	1	תהה
1										1	1						1	תהם
11			1						1						2	1	1	תוך
26		1									1	1		1		1		תחה

18-50	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	כרך
3	1											1						המם
																1		תנן
			1															הנר
															1			הפר
														1				הפש
15						4		1					6					השעה

DETAILED LIST OF RUNNING WORDS

Chapter 1	434
" 2	329
" 3	358
" 4	341
" 5	365
" 6	305
" 7	331
" 8	311
" 9	353
" 10	287
" 11	391
" 12	266
" 13	240
" 14	341
" 15	259
" 16	223
" 17	354
Total	5,488

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